

- 23 -

WHAT IS CLAIMED IS:

1. A capacitor cell comprising:
 - an anode material;
 - a cathode material spaced from and operatively associated with the anode material;
 - an electrolyte operatively associated with the anode material and the cathode material; and
 - one or more track-etched separator materials disposed between the anode material and the cathode material.
2. A capacitor cell of claim 1 wherein the track-etched separator materials comprise track- etched polymeric materials.
3. A capacitor cell of claim 2 wherein the track-etched materials comprise track- etched polycarbonate materials.
4. A capacitor cell of claim 1 wherein the track-etched materials comprise NUCLEPORE®, CYCLOPORE™, ISOPORE™, PORETICS®, SPI-Pore™ or combinations thereof.
5. A capacitor cell of claim 1 wherein the anode material, the cathode material, and the track-etched separator material are configured as one or more strips adhered together as a laminate.

- 24 -

6. A capacitor cell of claim 5 wherein the laminate is arranged in a coiled configuration.
7. A capacitor cell of claim 6 wherein the laminate is arranged in a flat coiled configuration.
8. A capacitor cell of claim 7 wherein the laminate is arranged in a cylindrical coiled configuration.
9. A capacitor cell of claim 5 wherein the laminate is arranged in a stacked configuration.
10. A capacitor cell of claim 1 wherein the anode material, the cathode material, and the track-etched separator material are each configured as one or more layers.
11. A capacitor cell of claim 10 wherein the one or more layers are configured as a stack of layers.
12. A capacitor cell of claim 11 wherein the stack of layers comprises separator layers positioned in between alternating anode and cathode layers.
13. A method of making a capacitor cell comprising:

- 25 -

providing track-etched material, anode material, and cathode material;
positioning the track-etched material in between the anode material and cathode material;
placing the positioned track-etched material, anode material, and cathode material into an enclosure;
filling the enclosure with an electrolyte; and
sealing the enclosure.

14. A method of claim 13 wherein the track-etched material is provided by obtaining a polyester membrane and subjecting the membrane to track-etch procedures.

15. A method of claim 14 wherein the track-etched material is provided by obtaining a polycarbonate membrane and subjecting the membrane to track-etch procedures.

16. A capacitor cell, comprising:
a pressed, sintered and formed, powdered metal anode member
having a pair of substantially flat, major opposing sides; and
a portion of track-etch material disposed on at least one of said pair of substantially flat, major opposing sides of said anode member, said portion of track etch material having a surface area approximately the same as a surface area of said anode member.

- 26 -

17. A capacitor cell according to claim 16, wherein said anode member comprises tantalum.
18. A capacitor according to claim 16, wherein said anode member comprises a one of: a D-shaped member, a C-shaped member, an ovoid-shaped member.
19. A capacitor according to claim 16, further comprising a second portion of track-etch material disposed on the other of said pair of substantially flat, major opposing sides of said anode member.
20. A capacitor according to claim 16, wherein said portion of track-etch material comprises a unitary sheet of material and has a surface area approximately twice that of the anode member and wherein said portion of track-etch material is folded around and substantially surrounds said anode member.